STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

April 11, 2006

Ms. Mary Bowers
Superintendent
Great Salt Bay Sanitary District
P.O. Box 23
Damariscotta, ME 04543

RE: Maine Pollutant Discharge Elimination System Permit #ME0102431
Maine Waste Discharge License #W007044-5L-F-R
Final Permit/License

Dear Ms. Bowers:

Enclosed please find a copy of your **final** MEPDES permit and Maine WDL (permit hereinafter) which was approved by the Department of Environmental Protection. Please read the permit and its attached conditions carefully. You must follow the conditions in the order to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State Law and is subject to enforcement action.

Any interested person aggrieved by a Department determination made pursuant to applicable regulations, may appeal the decision following the procedures described in the attached DEP FACT SHEET entitled "*Appealing a Commissioner's Licensing Decision.*"

If you have any questions regarding the matter, please feel free to call me at 287-7693.

Sincerely,

Gregg Wood
Division of Water Quality Management
Bureau of Land and Water Quality

Enc.
cc: Beth DeHaas, DEP/CMRO
Sandy Lao, USEPA

AUGUSTA
17 STATE HOUSE STATION
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STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

DEPARTMENT ORDER

IN THE MATTER OF

GREAT SALT BAY SANITARY DISTRICT	)	MAINE POLLUTANT DISCHARGE
NOBLEBORO, LINCOLN COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
DAMARISCOTTA MILLS PLANT	)	WASTE DISCHARGE LICENSE
ME0102431	)	
#W007044-5L-F-R **APPROVAL**	)	**RENEWAL**

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251 et. seq. and Maine Law 38 M.R.S.A., Section 414-A et seq., and applicable regulations, the Department of Environmental Protection (Department hereinafter) has considered the application of the GREAT SALT BAY SANITARY DISTRICT (GSBSD hereinafter), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The GSBSD has submitted a timely and complete application to the Department to renew combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0102431/ Maine Waste Discharge License (WDL) #W007044-5L-E-R, which was issued on July 12, 2001 and expired on January 12, 2006. The previous MEPDES permit/WDL (permit hereinafter) authorized the discharge of up to a monthly average flow of 0.015 million gallons per day (MGD) of secondary treated sanitary waste water from a municipal waste water treatment facility. The waste water treatment facility is referred to as the "Damariscotta Mills" sand filter system and discharges to the Damariscotta River Estuary "Salt Bay", Class SB, in Nobleboro, Maine.

RENEWAL SUMMARY

This permit is carrying forward all the terms and conditions of the previous permitting action.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated March 10, 2006, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.

2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.

3. The provisions of the State's antidegradation policy, 38 M.R.S.A., Section 464(4)(F), will be met, in that:

   a. Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;

   b. Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;

   c. The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;

   d. Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and

   e. The discharge will be subject to effluent limitations that require application of best practicable treatment.

4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

ACTION

THEREFORE, the Department APPROVES the above noted application of the GREAT SALT BAY SANITARY DISTRICT to discharge up to a monthly average flow of 0.015 million gallons per day (MGD) of secondary treated municipal waste waters to the Damariscotta River Estuary, Class SB, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations, including:

1. "*Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits*," revised July 1, 2002, copy attached.

2. The attached Special Conditions, including any effluent limitations and monitoring requirements.

3. This permit expires five (5) years from the date of signature below.

DONE AND DATED AT AUGUSTA, MAINE, THIS 11TH DAY OF April, 2006.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____ for
David P. Littell, Commissioner

PLEASE NOTE ATTACHED FACT SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: January 10, 2006.

Date of application acceptance: January 10, 2006.

Date filed with Board of Environmental Protection

FILED
APR 13 2006
BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE

This order prepared by Gregg Wood, BUREAU OF LAND AND WATER QUALITY

W70445LF 4/10/06

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. **OUTFALL #001A – Final Effluent**
The permittee is authorized to discharge secondary treated sanitary wastewater from **OUTFALL #001A** to the Damariscotta River Estuary. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	0.0150 MGD *[03]*	---	Report MGD *[03]*	---	---	---	Continuous *[99/99]*	Meter *[MT]*
Biochemical Oxygen Demand *[00310]*	2.8 lb/day *[26]*	4.2 lb/day *[26]*	4.6 lb/day *[26]*	30 mg/L *[19]* *[23]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Month *[02/30]*	Grab *[GR]*
Total Suspended Solids *[00530]*	2.8 lb/day *[26]*	4.2 lb/day *[26]*	4.6 lb/day *[26]*	30 mg/L *[19]* *[23]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Month *[02/30]*	Grab *[GR]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	2/Month *[02/30]*	Grab *[GR]*
Fecal Coliform Bacteria[1] *[31616]* (May 15 – September 30)	---	---	---	15/100 ml[2] *[13]*	---	50/100 ml *[13]*	1/Week *[01/07]*	Grab *[GR]*
Total Residual Chlorine[3] *[50060]*	---	---	---	---	---	1.0 mg/L *[19]*	1/Week *[01/07]*	Grab *[GR]*
pH (Std. Unit) *[00400]*	---	---	---	---	---	6.0 – 9.0 SU[4] *[12]*	1/Week *[01/07]*	Grab *[GR]*

The italicized numeric values bracketed in the table above are code numbers that the Department personnel utilize to code the monthly Discharge Monitoring Reports.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued) –

Footnotes:

Sampling Locations:

Effluent sampling- Samples for pH, fecal coliform bacteria, total residual chlorine and settleable solids shall be collected from the sampling valve located in the final effluent monitoring/chlorination pit. Samples for BOD and TSS shall be collected from the six-inch sand filter collection pipe located in the chlorine contact/pump station.

Any change in sampling location(s) must be reviewed and approved by the Department in writing.

Sampling –Sampling and analysis must be conducted in accordance with; a) methods approved in 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Human Services.

1. **Fecal coliform bacteria** - Limits and monitoring requirements are seasonal and apply between May 15 – September 30 of each year. The Department reserves the right to impose year-round disinfection to protect the health and welfare of the public.

2. **Fecal coliform bacteria** - To be reported as a geometric mean.

3. **Total Residual Chlorine (TRC)** – The limitations applies at the treatment plant's effluent pump station. Monitoring outside May 15 – September 30 is only required when elemental chlorine or chlorine based compounds are being utilized to disinfect the discharge.

4. **pH** - Effluent pH results outside the range of 6.0 – 9.0 standard units are not to be reported as exceptions provided the cause(s) for the exceedence(s) are naturally occurring. The permittee must provide the Department with written documentation as to the cause(s) of the pH results if found outside the 6.0 – 9.0 range.

SPECIAL CONDITIONS

B. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent shall not contain a visible oil sheen, foam or floating solids at any time which would impair the usages designated by the classification of the receiving waters.

2. The effluent shall not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated by the classification of the receiving waters.

3. The discharge shall not cause visible discoloration or turbidity in the receiving waters which would impair the usages designated by the classification of the receiving waters.

4. Notwithstanding specific conditions of this permit the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

C. DISINFECTION

If chlorination is used as the means of disinfection, an approved chlorine contact tank providing the proper detention time consistent with good engineering practice must be utilized followed by a dechlorination system if the imposed total residual chlorine (TRC) limit cannot be achieved by dissipation in the detention tank. The total residual chlorine in the effluent shall at no time cause any demonstrable harm to aquatic life in the receiving waters. The dose of chlorine applied shall provide a TRC concentration that will effectively reduce fecal coliform bacteria levels to or below those specified in Special Condition A, Effluent Limitation and Monitoring Requirements, of this permit.

D. TREATMENT PLANT OPERATOR

The waste water treatment facility must be operated under the direction of a person holding a minimum of a **Grade I** certificate [or Maine Professional Engineer (PE) certificate] pursuant to Title 32 M.R.S.A., Section 4171 et seq. All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

E. PROHIBITION OF NON-DOMESTIC USERS

The wastewater collection and treatment system may not be used to collect, treat or discharge wastewater other than from domestic users.

SPECIAL CONDITIONS

F. NOTIFICATION REQUIREMENT

In accordance with Standard Condition D, the permittee shall notify the Department of the following:

1. Any introduction of pollutants into the waste water collection and treatment system from an indirect discharger in a primary industrial category discharging process waste water; and

2. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system.

3. For the purposes of this section, adequate notice shall include information on:

   a. The quality and quantity of waste water introduced to the waste water collection and treatment system; and
   b. Any anticipated impact of the change in the quality or quantity of the waste water to be discharged from the treatment system.

G. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from the outfall cited in this permit. Discharges of waste water from any other point source are not authorized under this permit, but shall be reported in accordance with Standard Condition B(5) (Bypass) of this permit.

H. OPERATION & MAINTENANCE (O&M) PLAN

The permittee shall maintain a current written comprehensive Operation & Maintenance (O&M) Plan. The plan shall provide a systematic approach by which the permittee shall at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.

By December 31 of each year, or within 90 days of any process changes or minor equipment upgrades, the permittee shall evaluate and modify the O&M Plan including site plan(s) and schematic(s) for the wastewater treatment facility to ensure that it is up-to-date. The O&M Plan shall be kept on-site at all times and made available to Department and other regulattory personnel upon request.

Within 90 days of completion of new and or substantial upgrades of the wastewater treatment facility, the permittee shall submit the updated O&M Plan to their Department inspector for review and comment.

SPECIAL CONDITIONS

I. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and submitted to the Department **such that the DMR's are received by the Department on or before the fifteenth (15^{th}) day of the month** following the completed reporting period. A signed copy of the DMR and all other reports required herein shall be submitted to the Department assigned compliance inspector (unless otherwise specified) at the following addresses:

Maine Department of Environmental Protection
Central Maine Regional Office
Bureau of Land & Water Quality
Division of Water Quality Management
State House Station #17
Augusta, Maine 04333

J. REOPENING OF PERMIT FOR MODIFICATIONS

Upon evaluation of the tests results or monitoring requirements specified in Special Conditions of this permitting action, new site specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at any time, and with notice to the permittee, modify this permit to: (1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded;
(2) require additional effluent or ambient water quality monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

K. SEVERABILITY

In the event that any provision, or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit shall remain in full force and effect, and shall be construed and enforced in all aspects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Date: March 10, 2006

PERMIT NUMBER: **ME0102431**
LICENSE NUMBER: **W007044-5L-F-R**

NAME AND MAILING ADDRESS OF APPLICANT:

Great Salt Bay Sanitary District
Attn: Mary E. Bowers
P.O. Box 23
Damariscotta, ME 04543

COUNTY: **Lincoln County**

NAME AND ADDRESS OF FACILITY:

Bayview Road
Damariscotta Mills
Nobleboro, Maine

RECEIVING WATER/ CLASSIFICATION: **Damariscotta River Estuary /Class SB**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mary E. Bowers, Superintendent**
(207) 563-5105
E-Mail: willynme@lincoln.midcoast.com

1. APPLICATION SUMMARY

a. Application: The GSBSD has submitted a timely and complete application to the Department to renew combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0102431/ Maine Waste Discharge License (WDL) #W007044-5L-E-R, which was issued on July 12, 2001 and expired on January 12, 2006. The previous MEPDES permit/WDL (permit hereinafter) authorized the discharge of up to a monthly average flow of 0.015 million gallons per day (MGD) of secondary treated sanitary waste water from a municipal waste water treatment facility. The waste water treatment facility is referred to as the "Damariscotta Mills" sand filter system and discharges to the Damariscotta River Estuary "Salt Bay", Class SB, in Nobleboro, Maine (see Attachment A of this Fact Sheet).

1. APPLICATION SUMMARY

b. Source Description – The sand filter system serves a small outlying residential section of the sanitary district known as Damariscotta Mills. The wastewater treatment system serves a total of 59 residences of which 6 are not yet connected to the system as of the date of this permitting action. Of the remaining 53 residences, 9 are seasonal dwellings. In 1997, the GSBSD added ten residences to the system by extending the sewer line along Route 215 across the Damariscotta Lake "Mill Pond" bridge and into the Town of Newcastle. The construction was funded in part by the Department's Small Community Grants program. Wastewater is collected by a small collection system serving only the immediate neighborhood (see Attachment A of this Fact Sheet). Individual septic tanks serve 46 residences, three residences are served by one of the 5,000 gallon tanks and 10 residences are served by the other 5,000 gallon tank. The construction in 1997, added 550 feet of 8" sewer interceptor, a 5000-gallon septic tank, a submersible pumping station (at the Mill Pond bridge) and 250 feet of 3" force main. An additional pumping station is located at the intersection of Ladds and Bayview Roads. The two pumping stations along with the influent pumps for the sand filters are monitored with radio telemetry.

c. Waste Water Treatment - The GSBSD provides a secondary level of wastewater treatment via settling in individual septic tanks and biological treatment through a covered sand filter bed system. Individual septic tanks serve 50 residences on the sand filter system, with the exception of two 5000-gallon tanks. One 5000-gallon tank serves three residences in Nobleboro, and a 5000-gallon tank was installed in 1997 to serve the seven residences in Newcastle. The permittee reports the tanks are pumped once every three years on a rotating basis, with the exception of a Bed & Breakfast which is pumped once per year.

A general layout of the sand filter system is shown in Attachment B of this Fact Sheet. Wastewater collected from the individual septic tanks is pumped to two 106 foot by 52 foot sand filter beds that are operated in the alternating mode and the effluent is then chlorinated (sodium hypochlorite) prior to discharge. The chemical feed disinfection system replaced an ultraviolet light system in 1990. The applicant reports dechlorination was abandoned in 1999 following a dye study showing the effluent dilution factor is 1000:1 or greater at the end of the outfall pipe.

Chlorinated effluent is pumped approximately 500 feet through a 4" polyethylene outfall pipe into the main channel of the Damariscotta River Estuary. The final 50 feet of the pipe is a diffuser with fifteen-1/2" diameter perforations serving as ports to enhance mixing with the receiving waters. The perforated pipe is encased in a five-foot deep bed of crushed stone and rip-rap with approximately six feet of water over the crown of the pipe at mean low tide.

The sand filter system is not authorized to receive septage waste.

2. PERMIT SUMMARY

a. Terms and conditions – This permit is carrying forward all the terms and conditions of the previous permitting action.

b. History – The most recent relevant regulatory actions pertaining to the GSBSD facility include, but are not limited to, the following:

December 30, 1991 - The U.S. Environmental Protection Agency (EPA) renewed National Pollutant Discharge Elimination System (NPDES) permit #ME0101516. The permit served to permit both the main plant discharge in Damariscotta (outfall 001) and the sand filter discharge in Damariscotta Mills (outfall 002).

June 5, 1996 - The Department issued WDL #W007044-58-D-R increasing the monthly average flow limit from 11,000 gallons per day to 15,000 gallons per day. The sand filter system was first licensed by the Department in 1986, the year it was built. For a more complete licensing history see
WDL #W007044-58-D-R.

December 13, 1996 - The EPA modified NPDES permit #ME0101516 in accordance with the existing WDL and the Section 401 water quality certification requirements issued by the Department.

December 30, 1996 - Both the permit modification and authorization to discharge expired on this date.

July 29, 1999 - The Department administratively modified WDL #W007044-58-D-R to include a footnote regarding the reporting of effluent pH results.

January 12, 2001 - The Department received authorization from EPA to administer the NPDES program in Maine. From that point forward the program has been referred to as the MEPDES permit program and this permit has been assigned #ME0102431. The MEPDES permit replaced the NPDES permit #ME0101516 (outfall 002) issued by EPA on December 30, 1991 and modified on December 13, 1996.

July 12, 2001 – The Department issued combination MEPDES permit #ME0102431/ WDL #W007044-5L-E-R for a four and one half year term.

January 10, 2006 – The GSBSD submitted a timely and complete application to renew the MEPDES permit for the Damariscotta Mill's facility.

3. CONDITIONS OF PERMITS

Maine law, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, 38 M.R.S.A., Section 420 and Department rule 06-096 CMR Chapter 530, *Surface Water Toxics Control Program,* require the regulation of toxic substances not to exceed levels set forth in Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Maine law, 38 M.R.S.A § 469 classifies the Damariscotta River as a Class SB waterway at the point of discharge. Maine law, 38 M.R.S.A., §465 (2) establishes the classification standards for Class SB waters.

5. RECEIVING WATER CONDITIONS

A document entitled, The State of Maine, Department of Environmental Protection, 2004 Integrated Water Quality Monitoring and Assessment Report published by the Department pursuant to Section 305b of the Federal Water Pollution Control Act, indicates the Damariscotta River Estuary is attaining the standards of its assigned classifications.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

a. Flow: The previous licensing action established a monthly average flow limitation of 0.0150 MGD that is being carried forward in this permitting action. This limit reflects the current monthly average design flow capacity of the facility. A review of the monthly average flow data as reported on the Discharge Monitoring Reports submitted to the Department for the period January 2003 – December 2005 indicate the mean monthly flow has ranged from 0.004 MGD to 0.015 MGD with an arithmetic mean of 0.00783 MGD.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

c. Dilution Factors: Department Regulation Chapter 530 *Surface Water Toxics Control Program*, §4(A)(2) states:

> *(2) For estuaries where tidal flow is dominant and marine discharges, dilution factors are calculated as follows. These methods may be supplemented with additional information such as current studies or dye studies.*
>
> *(a) For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model.*
>
> *(b) For discharges to estuaries, dilution must be calculated using a method such as MERGE, CORMIX or another predictive model determined by the Department to be appropriate for the site conditions.*
>
> *(c) In the case of discharges to estuaries where tidal flow is dominant and marine waters, the human health criteria must be analyzed using a dilution equal to three times the chronic dilution factor.*

In September of 1999, Bigelow Laboratory for Ocean Sciences conducted a dye study to determine the effluent dilution from the Damariscotta Mills facility. In their November 1999 report they concluded that " the effluent is highly diluted in Salt Bay, with most areas exhibiting dilution rates between 1:1000 and 1:10,000 *[understood by the Department to be 1000:1 and 10,000:1]* or greater at both high tides and low tides on a day with 12,000 gallons of effluent discharged". Therefore, for purposes of this permitting action, the chronic dilution rates for this discharge are presumed to be 1000:1 or greater.

The 1999 report further states that "Higher concentrations to 40 ppb (100 to 1000 times dilution) were found...within 50 to 100 yards of the outfall...at low tide". This would correspond to the near field acute dilution zone so that the acute dilution would be between 100:1 and 1000:1.

For the purposes of this permitting action the Department is carrying forward the dilution factors from the previous permitting actions as follows:

Acute - 100:1 Chronic - 1,000:1 Harmonic mean[(1)] - 3,000:1

Footnote:
(1) See Chapter 530 §4(A)(2)(c) above.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

d. Biochemical Oxygen Demand (BOD5) & Total Suspended Solids (TSS): - The previous permitting action established monthly and weekly average BOD5 and TSS best practicable treatment (BPT) concentration limits of 30 mg/L and 45 mg/L respectively, that are based on secondary treatment requirements of the Clean Water Act of 1977 §301(b)(1)(B) as defined in 40 CFR Part 133.102 and Department rule Chapter 525(3)(III). The maximum daily BOD5 and TSS concentration limits of 50 mg/L were based on a Department best professional judgment of BPT. All three concentration limits are being carried forward in this permitting action.

As for mass limitations, the previous permitting action established monthly average, weekly average and daily maximum limitations based on a monthly average flow 0.0110 MGD that are being carried forward in this permitting action. A flow of 0.0110 MGD was utilized in the calculations as this was the original flow limitation established in the first licensing action. The permittee has requested to carry forward the limits for BOD and TSS from the previous licensing action were derived as follows:

Monthly average: (0.0110 MGD)(8.34)(30 mg/L) = 2.8 lbs/day
Weekly average: (0.0110 MGD)(8.34)(45 mg/L) = 4.2 lbs/day
Daily maximum: (0.0110 MGD)(8.34)(50 mg/L) = 4.6 lbs/day

This permitting action is not establishing a requirement of 85% removal for BOD and TSS pursuant to Department rule Chapter 525(3)(III)(a&b)(3) due to the fact that treatment take places in individual home owners septic tanks prior to the waste water being conveyed to the District's collection system and treatment facility.

Monitoring frequencies for BOD and TSS of 2/Month are being carried forward from the previous permitting action and are based on long standing Department guidance for facilities with a monthly average flow limitation between 0.0 MGD and 0.100 MGD.

A review of the DMR data for the period January 2002 to the December 2005 indicates the discharge from the waste water treatment facility is consistently below 50% of the mass and concentration limits in this permitting action.

e. Settleable Solids - The previous permit established a daily maximum concentration BPT limit of 0.3 ml/L that is being carried forward in this permitting action. A review of the monthly DMR data for the period January 2003 to December 2005 indicates the daily maximum settleable solids concentration has been reported as 0.0 ml/L 100% of the time for said period.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

f. Fecal Coliform Bacteria - The previous permitting action established monthly average and daily maximum limits of 15 colonies/100 ml and 50 colonies/100 ml and are based on the Maine Water Classification Program criteria for the receiving waters (including standards in the National Shellfish Sanitation Program) and requires application of the BPT technology. The limitations apply seasonally, from May 15 – September 30 of each year.

A review of the monthly DMR data for the period calendar year May 2002 to the September 2005 indicates the seasonal monthly average (geometric mean) bacteria levels have ranged from 0 colonies/100 ml to 3 colonies/100 ml with an arithmetic mean of 0.8 colonies/100 ml. As for the daily maximum, the DMR data indicates the bacteria levels range from 0 colonies/100 ml to 60 colonies/100 ml (outlying data point) with an arithmetic mean of 5.4 colonies/100 mL. The DMR data indicates the permittee is in compliance with the monthly average limit 100% of the time and in compliance with the daily maximum limit 94% of the months evaluated in said timeframe.

The monitoring frequency of 1/Week in the previous permitting action is being carried forward in the permitting action and is based on a long standing Department guidance for facilities permitted to discharge between 0.0 MGD and 0.1 MGD.

g. Total Residual Chlorine - Limits on total residual chlorine (TRC) are specified to ensure attainment of the in-stream water quality criteria for levels of chlorine and that BPT technology is utilized to abate the discharge of chlorine. Permits issued by this Department impose the more stringent of the calculated water quality based or BPT based limits. The previous permitting action established a daily maximum limit of 1.0 mg/L. With dilution factors as determined above, water quality based thresholds for TRC may be calculated as follows:

Parameter	Acute Criteria	Chronic Criteria	Acute Dilution	Chronic Dilution	Acute Threshold	Chronic Threshold
Chlorine	13 ug/L	7.5 ug/L	100:1	1,000:1	1.3 mg/L	7.5 mg/L

Example calculation: Acute – 0.013 mg/L (100) = 1.3 mg/L

The Department's BPT limitation of 1.0 mg/l is more stringent than the calculated water quality based limit. Therefore, the BPT limitation of 1.0 mg/l is being carried forward from the previous permitting action along with the 1/Week monitoring requirement.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

The DMR data for the period calendar year May 2002 to the September 2005 indicates the seasonal daily maximum concentration levels of TRC range from 0.24 mg/L to 0.98 mg/L with an arithmetic mean of 0.78 mg/L. The DMR data indicates the permittee is in compliance with the daily maximum limit 100% of the months in said timeframe. It is noted TRC is currently measured at the effluent pump station and it is anticipated that substantial reduction in TRC values occurs prior to the actual discharge at the end of outfall pipe.

h. pH – The previous licensing action established a pH range limitation of 6.0 –9.0 standard units (SU) pursuant to Department regulation, Chapter 525(3)(III)(c). The limits are considered BPT by the Department. The DMR data for the period calendar year January 2002 to the December 2005 indicates the minimum pH ranges from 5.0 SU to 6.2 SU and the maximum pH ranges from 5.45 SU to 6.73 SU.

The monitoring frequency of 1/Week in the previous permitting action is being carried forward in the permitting action and is based on a long standing Department guidance for facilities permitted to discharge between 0.0 MGD and 0.1 MGD.

i. Mercury: Pursuant to Maine law, 38 M.R.S.A. §420 and Department rule, 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # W006048-5L-C-R by establishing interim monthly average and daily maximum effluent concentration limits of 12.4 parts per trillion (ppt) and 18.5 ppt, respectively, and a minimum monitoring frequency requirement of two (2) tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001. However, effective June 15, 2001, the Maine Legislature enacted Maine law, 38 M.R.S.A. §413, sub-§11 specifying that interim mercury limits and monitoring requirements remain in effect. It is noted that the mercury effluent limitations have not been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit as the limits and monitoring frequencies are regulated separately through Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519. The interim mercury limits remain in effect and enforceable and modifications to the limits and/or monitoring frequencies will be formalized outside of this permitting document pursuant to Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519.

j. Whole Effluent Toxicity (WET) and priority pollutant testing - Maine law, 38 M.R.S.A., Sections 414-A and 420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department Rules, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, and Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants* set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Chapter 530 §2(A)(1) that states

The following dischargers are exempt from testing requirements of this rule unless the Department determines that there is a need for testing based on the nature, location or circumstances of an individual discharge.

(1) *Discharges from individual discharge points licensed to discharge less than 50,000 gallons per day of solely domestic wastewater and with a chronic dilution factor of at least 50 to 1, provided no holding tank wastes containing chemicals are accepted by the facility;*

Based on the criteria cited above, the GSBSD's Damariscotta Mills facility is not categorically subject to Chapter 530 testing requirements. However, should circumstances at the facility change such that the Department has a reason to believe the discharge has a reasonable potential to exceed ambient water quality criteria as established in Department rule Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants,* this permit may be reopened pursuant Special Condition J, *Reopening of Permit For Modifications,* to establish appropriate WET, priority pollutant and or analytical testing.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the water body to meet standards for Class SB classification.

8. PUBLIC COMMENTS

Public notice of this application was made in the Lincoln County News newspaper on or about January 5, 2006. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

9. DEPARTMENT CONTACTS

Additional information concerning this permitting action may be obtained from and written comments should be sent to:

Gregg Wood
Division of Water Quality Management
Bureau of Land and Water Quality
Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017
(207) 287-7693
E-mail: gregg.wood@maine.gov

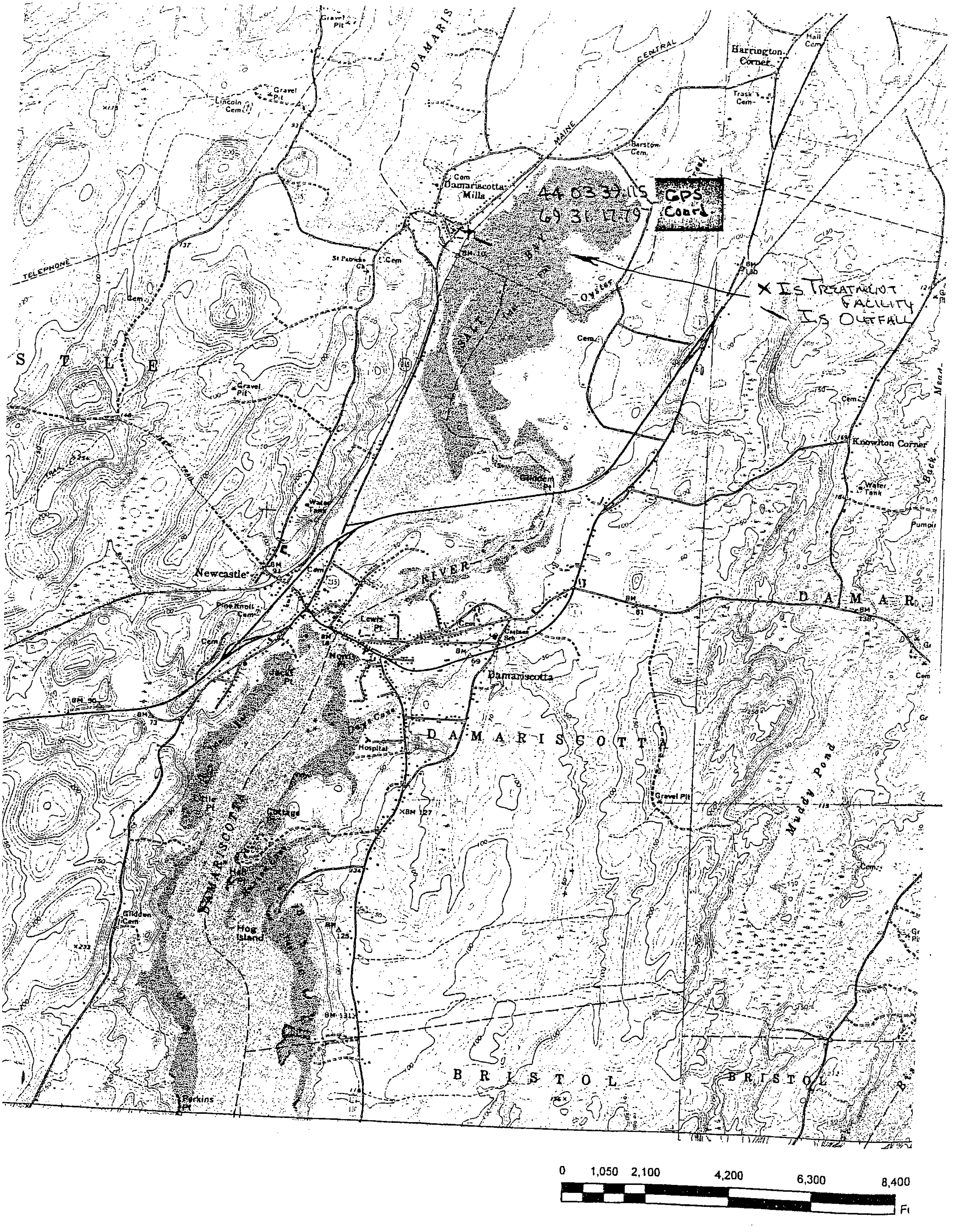
10. RESPONSE TO COMMENTS

During the period of March 10, 2006 through the date of issuance of this permit, the Department solicited comments on the proposed draft MEPDES permit/WDL for the discharge from the Great Salt Bay Sanitary District's Damariscotta Mills waste water treatment facility. The Department received written comments from the permittee in a letter dated March 15, 2006. The Department has prepared a response to one of the comments that resulted in a change to permit conditions.

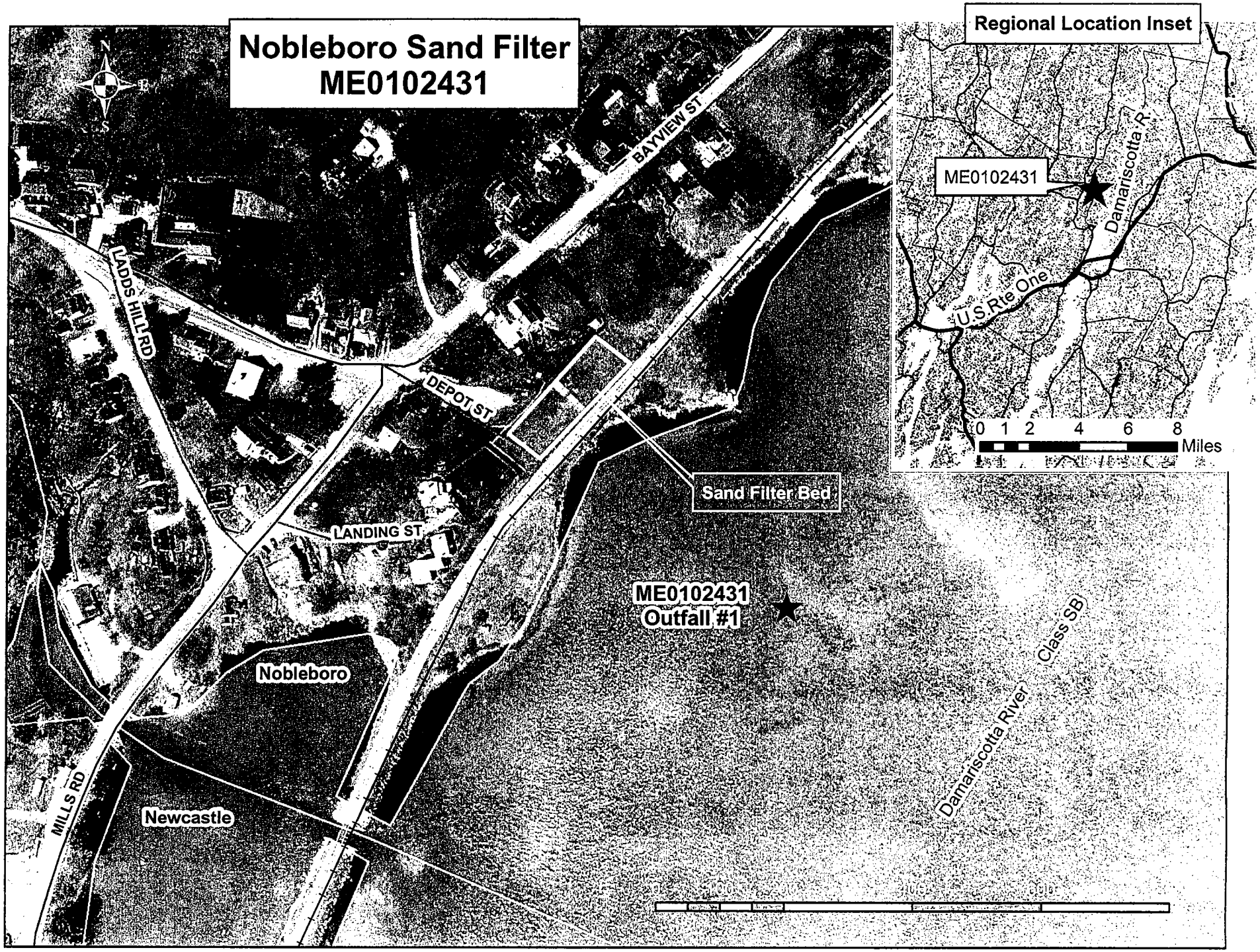
Comment #1: The permittee requested the Department eliminate the requirement to maintain an 85% removal rate for BOD and TSS as waste waters generated by individual residences receives a primary level of treatment prior to the waste water being conveyed to the District's collection and treatment system.

Response #1: The Department agrees with the permittee that holding the District to a removal of 85% is inappropriate given that up to 30% of the BOD and 50% of the TSS is removed prior to being conveyed to the District's collection and treatment system. Therefore, the Department has removed said limitation and modified the superscripts associated with the table on page 4 of the permit and modified the footnotes on page 5 of the permit accordingly. In addition, the Department has modified the language regarding percent removal on page 6 of the Fact Sheet.

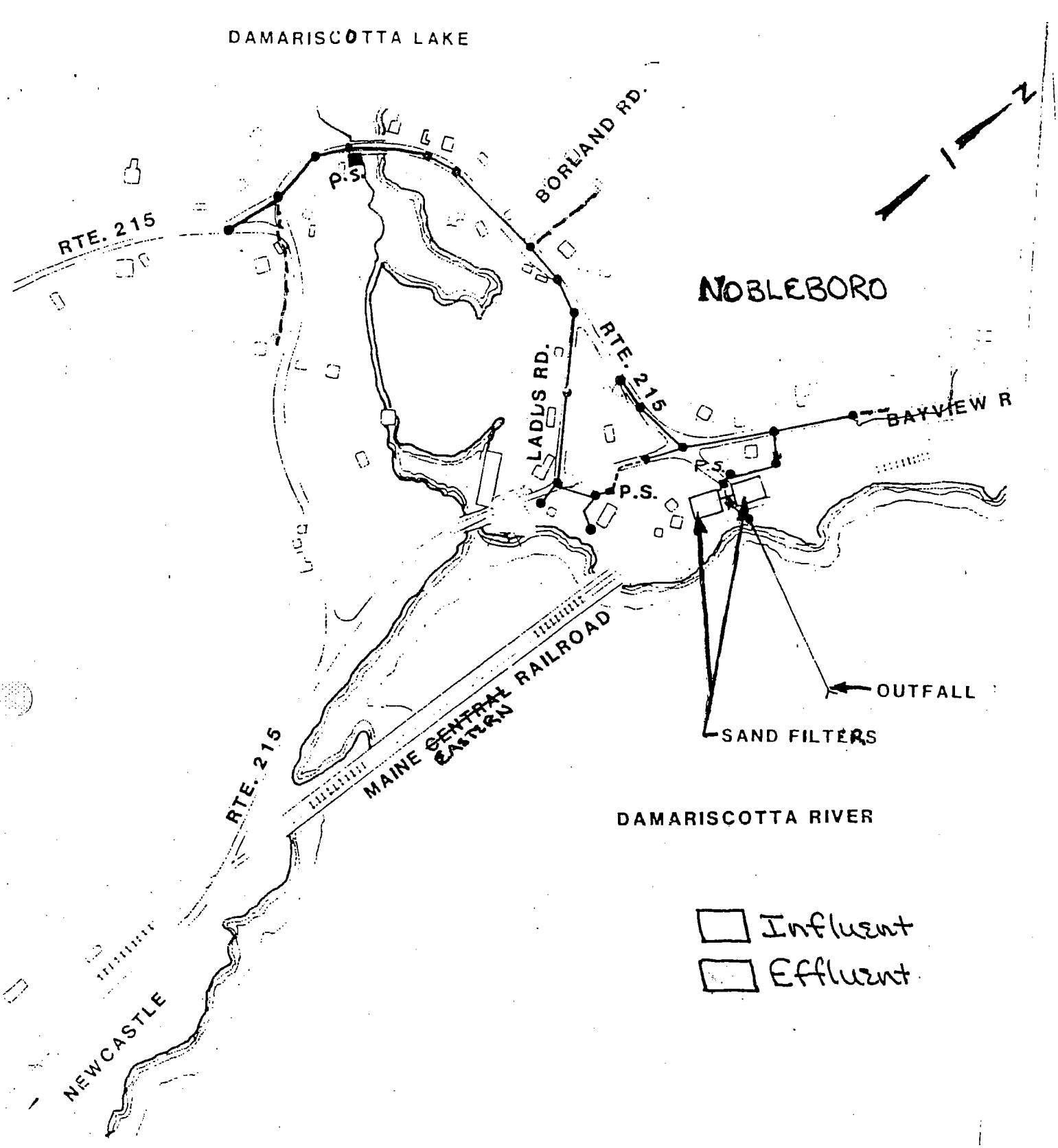
ATTACHMENT A



44 03 39.115
69 31 17.79
GPS Coord
X Is Treatment Facility
Is Outfall
Harrington Corner
Trask Cem
Barstow Cem
Hall Cem
Lincoln Cem
Gravel Pit
DAMARIS
MAINE
CENTRAL
Damariscotta Mills
Cem
TELEPHONE
St Patricks Ch
Oyster
Knowlton Corner
Water Tank
Glidden Pt
Newcastle
RIVER
Pine Knoll Cem
Lewis Pt
Damariscotta
D A M A R
D A M A R I S C O T T A
Hospital
Muddy Pond
Gravel Pit
Little Pt
Cottage
Hog Island
Glidden Cem
DAMARISCOTTA
B R I S T O L
BRISTOL
Perkins Pt
0
1,050
2,100
4,200
6,300
8,400

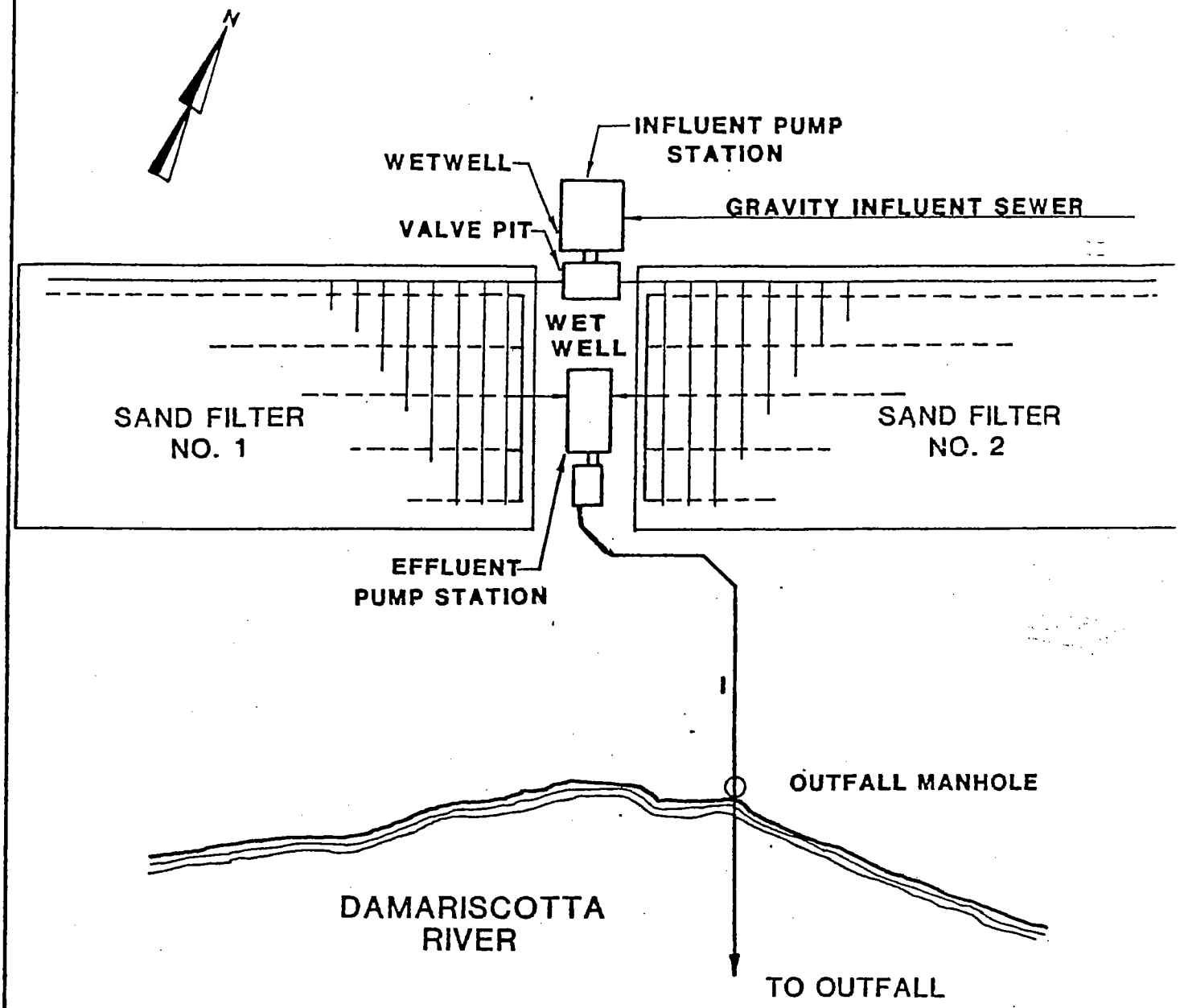

Nobleboro Sand Filter
ME0102431
N
E
S
BAYVIEW ST
LADDS HILL RD
DEPOT ST
LANDING ST
MILLS RD
Nobleboro
Newcastle
Sand Filter Bed
ME0102431
Outfall #1
Class SB
Damariscotta River
Regional Location Inset
ME0102431
Damariscotta R.
U.S Rte One
0 1 2 4 6 8
Miles

ATTACHMENT B



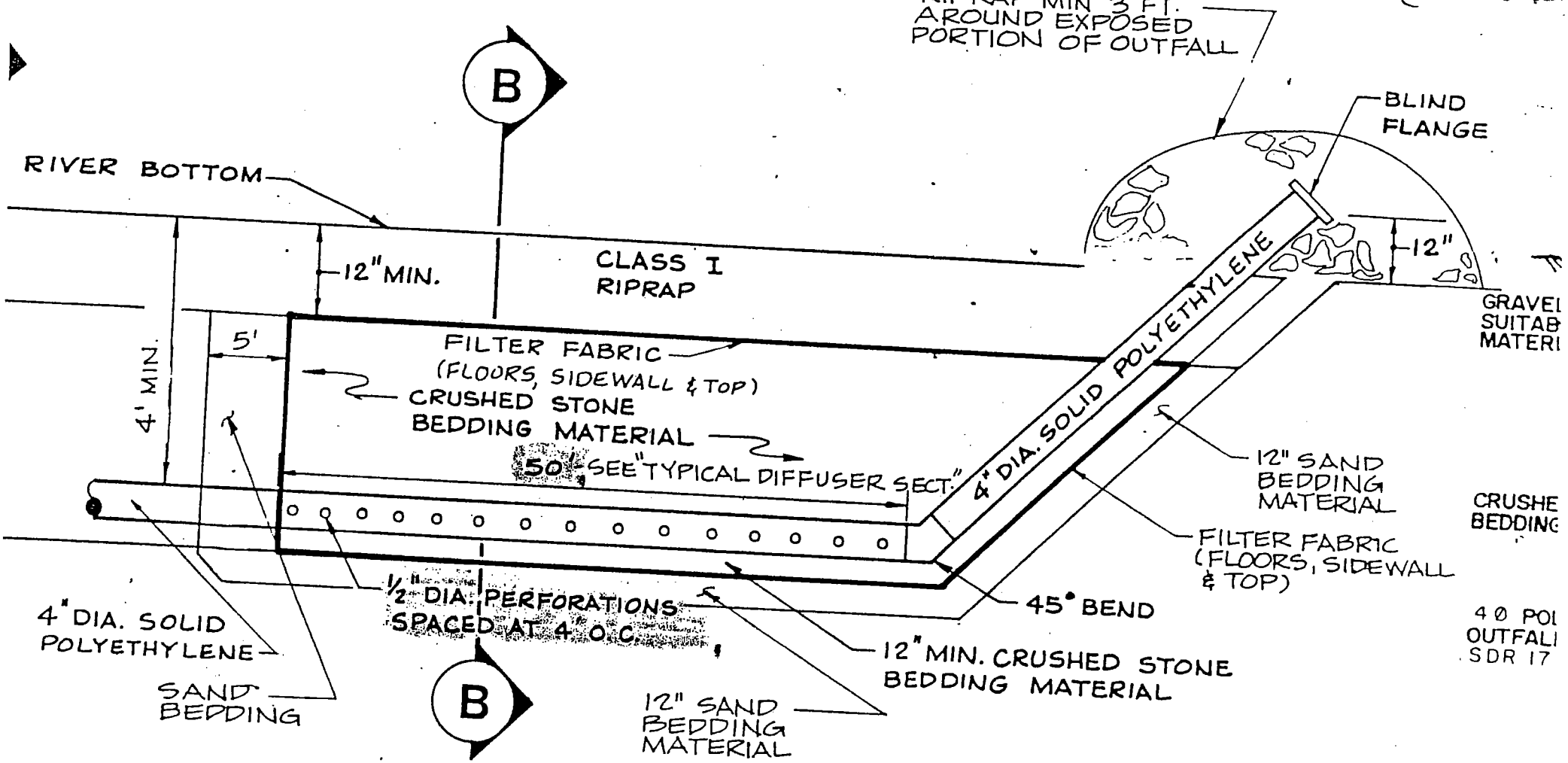
LOCATION PLAN

1" = 400'



GENERAL LAYOUT
DAMARISCOTTA MILLS

DETAIL OF DIFFUSER DISCHARGE — [illegible] MILLS (WOBURN)



NOTE: CONCRETE ANCHORS OMITTED FOR CLARITY

OUTFALL DETAIL

N.T.S.